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09/911,596	07/24/2001	Tsutomu Uenoyama	33826	3659

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EXAMINER

WONG, ALLEN C

ART UNIT PAPER NUMBER

2613

DATE MAILED: 01/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,596

Applicant(s)

UENOYAMA ET AL.

Examiner

Allen Wong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) _____ is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9,10,12-18,20,21,23 and 24 is/are rejected.
- 7) ☒ Claim(s) 8,11,19 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 11/14/05 have been fully read and considered but they are not persuasive.

Regarding lines 13-14 and 17-22 on page 10 of applicant's remarks, applicant asserts that Woodhead does not disclose the measuring of compression time. The examiner respectfully disagrees. In column 18, line 45 to column 19, line 4, Woodhead states that the transit times or transmission times from the encoder are measured and obtained. Thus, Woodhead teaches the measuring of compression time.

Regarding lines 1-3 and 12-15 on page 11 of applicant's remarks, applicant contends that neither Yagasaki nor Woodhead nor any combination thereof teaches the "a processing time measuring unit for measuring...the transmission time via the video transmission unit". The examiner respectfully disagrees. In column 18, line 45 to column 19, line 4, Woodhead states that the transit times or transmission times from the encoder are measured and processed. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yagasaki and Woodhead together as a whole for removing jitters during the

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transmission of video data so as to produce high quality images, as disclosed in Woodhead col.6, lines 49-57. Dependent claims 2-3, 5-7, 13-14, and 16-18 are rejected for similar reasons. Dependent claims 4 and 15 are rejected for at least similar reasons as claims 1 and 12. Dependent claims 9, 10, 20 and 21 are rejected for at least similar reasons as claims 1 and 12.

Dependent claims 8, 11, 19 and 22 are still objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Thus, the rejection is maintained.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-7, 12-14, 16-18 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagasaki (5,136,376) in view of Woodhead (5,640,388).

Regarding claims 1 and 12, Yagasaki discloses a video compression transmission method and apparatus for compressing a digital video signal and transmitting the resulting signal (see fig.2 and 6), comprising:

a video compression unit for performing compression encoding on an input digital video signal (fig.2, element 2 and fig.6);

a video transmission unit for transmitting to outside the signal compression-encoded by the video compression unit via a communication line (fig.2 and 6, element 3, note the transmission buffer is transmitting data outside the signal compression encoded by compression unit 2); and

a controller for controlling the operation of the video compression unit and the video transmission unit (fig.6, element 31), wherein the video compression unit and the video transmission unit are operated in parallel (fig.2, note video compression unit and transmission unit are operated in parallel).

Yagasaki does not specifically disclose a processing time measuring unit for measuring the compression encoding time via the video compression unit and the transmission time via the video transmission unit. However, Woodhead teaches the measurement of transit times or transmission times from the encoder (col.18, ln.45 to col.19, ln.4). Therefore, it would have been obvious to one of ordinary skill in the art to combine the teachings of Yagasaki and Woodhead together as a whole for removing jitters during the transmission of video data so as to produce high quality images (Woodhead col.6, ln.49-57).

Note claims 23-24 have similar corresponding elements.

Regarding claims 2, 5, 6, 13 and 16-17, Yagasaki discloses wherein at least one of a compression encoding process via the video compression unit and a transmission process via the video transmission unit can be changed by the controller (fig.6, element 31 can affect the video compression and the transmission processes).

Regarding claims 3 and 14, Yagasaki discloses wherein the change in the compression encoding process via the video compression unit includes at least one of a change in the compression ratio of pictures and a change in the video compression encoding details (col.26, ln.11-14 and fig.6, note the quantization 16 can affect the picture compression ratio or the quantization ratio and the video compression details by relying on the results and commands sent by controller 31, also there is the transformation circuit 15 and the motion detection/estimation/compensation circuit to affect the video compression details).

Regarding claims 7 and 18, Yagasaki discloses wherein the set conditions include the allowable range of at least one of the transmission rate, required transmission time and picture quality (col.26, ln.40-53; note transmission rate, transmission time and picture quality affect the quantization to set conditions proper for video compression).

1. Claims 4 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagasaki (5,136,376) and Woodhead (5,640,388) in view of Lee (5,638,129).

Regarding claims 4 and 15, Yagasaki discloses wherein the change in the compression encoding process via the video compression unit includes at least one of a change in the compression ratio of pictures and a change in the video compression encoding details (col.26, ln.11-14 and fig.6, note the quantization 16 can affect the picture compression ratio or the quantization ratio and the video compression details by relying on the results and commands sent by controller 31, also there is the

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transformation circuit 15 and the motion detection/estimation/compensation circuit to affect the video compression details).

Yagasaki does not specifically disclose wherein the change in the video compression encoding process includes at least one of a change in the motion vector exploration method and a change in the type of filters applied to pictures and presence/absence of filters. However, Lee discloses the video compression encoding process including a change in the motion vector exploration method and changing filters (col.6, ln.15-35). Therefore, it would have been obvious to one of ordinary skill in the art to incorporate the teachings of Yagasaki and Lee, as a whole, for accurately encoding the image data with precise motion vector detection and estimation (Lee col.2, ln.48-53).

Claims 9-10 and 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yagasaki (5,136,376) and Woodhead (5,640,388) in view of Moriyama (5,537,409).

Regarding claims 9-10 and 20-21, Yagasaki discloses the preprocessing circuit and the input storage that stores the digital input video images. Yagasaki does not specifically disclose the controller controlling the operation of the video input unit. However, Moriyama discloses a controller that does control the output of the inputted digital images (fig.6, element 26 controls the inputted images in preparation for the input images to be compressed and transmitted). Therefore, it would have been obvious to one of ordinary skill in the art to take the teachings of Yagasaki and

Moriyama, as a whole, for eliminating synchronization complications during the video compression process (Moriyama col.1, ln.34-38).

Allowable Subject Matter

2. Claims 8, 11, 19 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Yagasaki discloses a method of coding video signals and transmission system. Lee discloses image processing apparatus using pixel-by-pixel motion estimation based on feature points. Moriyama discloses synchronizing system for time-divided video and audio signals. The prior art does not specifically disclose the limitation "wherein the controller changes at least one of the compression encoding process via the video compression unit and the transmission process via the video transmission unit depending on the set conditions and the output of the processing time measuring unit." Furthermore, the prior art does not specifically disclose wherein the video input unit comprises a video apparatus controller for supplying a digital video signal from external video apparatus to the video compression unit as required at a speed equal to or greater than the speed required for the compression encoding via the video compression unit.

Conclusion

3. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

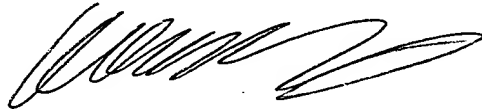
Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen Wong whose telephone number is (571) 272-7341. The examiner can normally be reached on Mondays to Thursdays from 8am-6pm Flextime.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mehrdad Dastouri can be reached on (571) 272-7418. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen Wong
Primary Examiner
Art Unit 2613

AW
1/23/06